KPMG
cutting through complexity

PROPOSAL TO SERVE

The Allegheny County Department of Human Services

Design and Implement Decision Support Tools and Predictive Analytics in Human Services

April 18, 2014

kpmg.com

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April 18, 2014

Allegheny County Department of Human Services
Attn: Leslie Lewis-Pollard
One Smithfield St. 5th Floor
Pittsburgh, PA 15222

Dear Ms. Lewis-Pollard,

On behalf of KPMG LLP (KPMG), I appreciate the opportunity to present our proposal to provide professional services to the County of Allegheny's (the County) Department of Human Services. Our proposal demonstrates KPMG's and our teammate Walter R. McDonald Associates' considerable resources and reach, experienced and skilled professionals, dedication, and commitment to successfully develop of a child welfare predictive model and data analytics methodology for the County in an efficient and timely manner, and—importantly—at a fair fee. We believe our extensive knowledge of the child welfare domain, Pennsylvania government entities, depth of state and local government experience, within Pennsylvania and beyond, and well established experience developing data management, business intelligence, and data analytics solutions makes KPMG the right and ideal choice for the County. In fact, based on our team's differentiators, we are proposing completing this engagement well within your required timeframe.

These differentiators include the following:

- **Relevant Experience:** A pre-built child welfare predictive model that we have deployed successfully for New York City's Administration for Children's Services.

- **An Experience Team:** A globally recognized team of subject matter professionals in the health and human services domain areas.

- **Access to a Global Network:** A global business intelligence and data analytics network consists of approximately 3,500 practitioners worldwide with over 1,500 in the United States.

- **Market-leading professionals with the relevant experience the County requires:** KPMG will bring a leading team of human services domain and data analytics professionals who possess significant experience performing similar engagements to the County's project.

- **Well-established Business Intelligence and Data Analytics Methodology:** As a result of numerous business intelligence and data analytics engagements, and commitment and investments in Business Intelligence (BI) and Data Analytics (DA),

KPMG LLP is a Delaware limited liability partnership,
the U.S. member firm of KPMG International Cooperative
("KPMG International"), a Swiss entity.

KPMG developed a BI & DA methodology, with corresponding templates and models that have been executed on multiple engagements. These act as both framework development accelerators as well as checkpoint mechanisms for component completeness and quality assurance.

- **Leadership position in service to the public sector and an unrivaled commitment to the Commonwealth:** KPMG has a well established public sector, business segment with more than 2,000 professionals who devote their full time efforts to serving more than 2,300 clients at federal, state, and local levels in the United States. KPMG operates in Pennsylvania from offices located in Harrisburg, Philadelphia, and Pittsburgh. Staffed with approximately 1,250 professionals, KPMG serves governments, publicly traded entities, privately owned businesses, and not for profits throughout the Commonwealth and beyond.

In closing, I also want to express that with KPMG, the County will experience a level of integrity, professionalism, and capability that we believe exceeds that of other professional service firms. Furthermore, as your engagement leader, I will see that your needs are met with the high-quality service for which KPMG has long been known and that you expect, deserve, and require. If you have questions or require additional information, do not hesitate to contact me at 267-256-2600 or rwentz@kpmg.com.

Very truly yours,

KPMG LLP

Robert A. Wentz
Lead Engagement Managing Director
267-256-2600
rwentz@kpmg.com

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I. Executive Summary

Company Profile

KPMG International Cooperative's (KPMG International) global business intelligence and data analytics network consists of approximately 3,500 practitioners worldwide with over 1,500 in the United States.

The key proposed staff for this engagement includes **Dr. Patrick Curtis** and **Yuriy Tchamourliyski**. Patrick has been a researcher, manager, and consultant for over 25 years in early childhood education, child welfare, and related social services, with special experience in the design, funding, and administration of research and evaluation at the national level. His work has had direct bearing on policy formulation, program assessments, analysis, and utility of data, as well as in the provision of technical assistance to state, local, and private, not-for-profit agencies. Yuriy, a Director in KPMG's Economic and Valuation Services practice, has over 10 years of experience in projects involving economics, statistics, and financial analysis, and was the lead designer for our child welfare predictive model.

KPMG LLP (KPMG), the United States audit, tax, and advisory member firm of KPMG International, has maintained a commitment throughout its history to providing leadership, integrity, and quality. As one of the Big Four professional services firms, KPMG traces its origins back to 1897. With more than 24,000 professionals, including more than 1,900 partners in the United States alone, KPMG offers its clients the scale, global reach, industry insight, and multidisciplinary range of services they require. KPMG's partners and professionals provide a range of services, working from offices covering clients in all 50 states—we are a significant presence in all major U.S. markets. KPMG has 89 offices in United States.

As a firm we have three offices located in state of Pennsylvania (Harrisburg, Philadelphia, and Pittsburgh). This engagement will be led by **Robert Wentz** who leads numerous projects within the state. Staffed with approximately 1,250 professionals, KPMG serves publicly traded entities, privately owned businesses, governments, and not-for-profits throughout the Commonwealth and beyond.

Proposed Collaboration

KPMG has elected to augment our team with professionals from Walter R. McDonald and Associates (WMRA). WRMA has developed a national reputation for combining social science research and evaluation capabilities with innovative information systems and technological experience. For over 30 years, WRMA has provided these services to: federal, state, and local governmental agencies; private, nonprofit organizations; national associations and consortia; and foundations.

Decision Support Question to be Addressed

KPMG will be addressing predicting/forecasting the mix of the County's future foster care population, its characteristics, and its resource and facility needs. In addition to the predictive model results, we will be delivering a tailored version of our data analytics methodology, and training on the model and the methodology. The model and the methodology may be expanded by the County to address other child welfare predictions.

Proposed Solution and Approach

Using our existing predictive model, our data analytics methodology, and our tools, techniques, and libraries, we will deliver a predictive model tailored to the County's needs, an associated model design and run time guide, a modeling methodology tailored for Allegheny County, and knowledge transfer to the County for expanding the model.

Funding Request

We estimate the price of this engagement to be approximately $350,000, and will be conducted over a four-month period.

II. Narrative

Organizational Description

KPMG LLP (KPMG) has maintained a commitment throughout its history to providing leadership, integrity, and quality. As one of the Big Four professional services firms, KPMG traces its origins back to 1897 and was incorporated in 1987 in the state of Delaware. With more than 23,000 professionals, including more than 1,800 partners in the U.S. alone, KPMG offers its clients the scale, global reach, industry insight, and multidisciplinary range of services they require. KPMG partners and professionals provide a range of services, working from offices covering clients in all 50 states—we are a significant presence in all major U.S. markets. KPMG is headquartered at 345 Park Avenue, New York, NY 10154-0102 and has offices in 89 cities. Globally, KPMG has 155,000 professionals and 8,600 partners working together to deliver value in 156 countries worldwide.

KPMG operates in Pennsylvania from offices located in Harrisburg, Philadelphia, and Pittsburgh. Staffed with approximately 1,250 professionals, KPMG serves publicly traded entities, privately owned businesses, governments, and not-for-profits throughout the Commonwealth and beyond.

Our teammate, Walter R. McDonald Associates (WRMA), has developed a national reputation for combining social science research and evaluation capabilities with innovative information systems and technological experience. For over 30 years, WRMA has provided these services to: federal, state, and local governmental agencies; private, nonprofit organizations; national associations and consortia; and foundations.

Organizational Overview

KPMG International's global business intelligence and data analytics network consists of approximately 3,500 practitioners worldwide with over 1,500 in the United States.
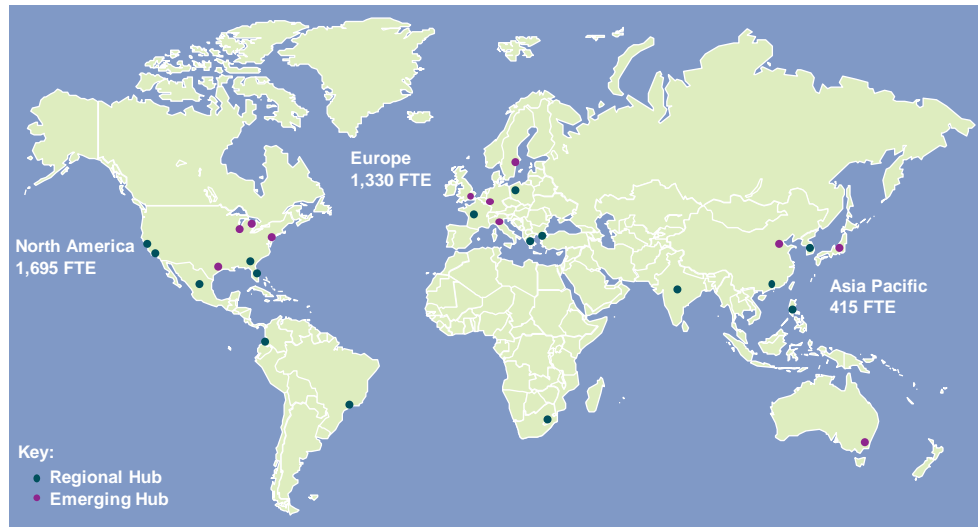
Figure 1: KPMG Global Reach Map

Over the past several years, KPMG conducted over 100 business intelligence and data analytics engagement for clients across both commercial and public sectors.

Relevant Experience

Examples of KPMG's data analytics engagements in the public sector include the following:

- Developed a child welfare model to predict future population characteristics and needs. The design of the predictive model was done in collaboration with New York City's Administration for Children's Services.
- Analyzed population health dynamics through census data, client clinical data, and discharge and cost data to understand the clinical drivers in the population and the identification of opportunities for intervention.
- Leveraged statistical methods in conducting population demand analysis and identified what additional research may be useful concerning the Pennsylvania insured markets (individual, small group, and large group), the Pennsylvania uninsured market, and the Pennsylvania self insured market.
- Developed and implemented an improper payments error calculation and reporting program that meets the requirements outlined in the Improper Payments Elimination and Recovery Act of 2010.
- Used Predictive Modeling to develop and enhance a large Federal Agency's ongoing fraud detection capabilities.

Based on the growing need for enhanced analytical capabilities and improved state and federal data submission, authentication, communication, and access—our teammate WRMA, operates an enhanced analytical capabilities database (NCANDS-EAC). This EAC is a multiyear, multistate database, where over 27 million case-level data records have been reconfigured into relational files in a data warehouse, accessed by an online analytical processing (OLAP) application. The result is WRMA's ability to conduct complex analytical and ad hoc queries with increased speed, accuracy, and consistency.

WRMA has implemented health and human services information systems that help serve children, youth and families, the elderly, Native Americans, the developmentally disabled, substance abusers, juvenile and adult offenders, and other client populations. They have assisted clients with the evaluation of complex programs in order to determine outcomes, improve the quality of the services delivered, improve efficiency and productivity, reduce the costs of providing services, improve the outcomes achieved from their provision of services, or some combination of these objectives. WRMA's projects have been related to many different focus populations, including the following:

- People with mental illness
- People with HIV and AIDS
- Individuals with developmental disabilities
- Parents with substance abuse problem(s)
- Juvenile and adult offenders
- Abused and neglected children and adults
- Children in foster care
- Adolescent parents
- The homeless
- Those receiving other social or health services

In addition to the NCANDS project, WRMA currently maintains and operates two additional national data collection and analysis systems, and has defined requirements, and designed, developed, and implemented over 150 health and human services information systems for federal, state and local agencies.

Collaborative Process and IT Vendor Implementation/Integration Approach

Our approach for collaborating with the County in developing and implementing a predictive analytics model is described in detail in the next section.

On state and local government projects, KPMG often provides program monitoring, quality assurance, or independent verification and validation services, working with both the client and the existing IT vendors to reduce program implementation risk. There are instances where KPMG is the systems integrator as with the State of Hawaii where we are the systems integrator for their Health Insurance Exchange, integrating multiple vendor solutions. In all of these roles, we used established methodologies for working with our clients and existing IT vendors.

III. Project Description

Project Goals and Objectives

The primary goal of the project is to adapt our existing baseline predictive model and tailor it for the County. The secondary goal of the project is to collaborate with the County in adapting the predictive model and to train the County on our approach, interfaces, and techniques, whereby the County extend the model to answer additional Child Welfare questions.

Approach and Deliverables

Our overall approach for collaborating with the County is shown in **Figure 2** below.
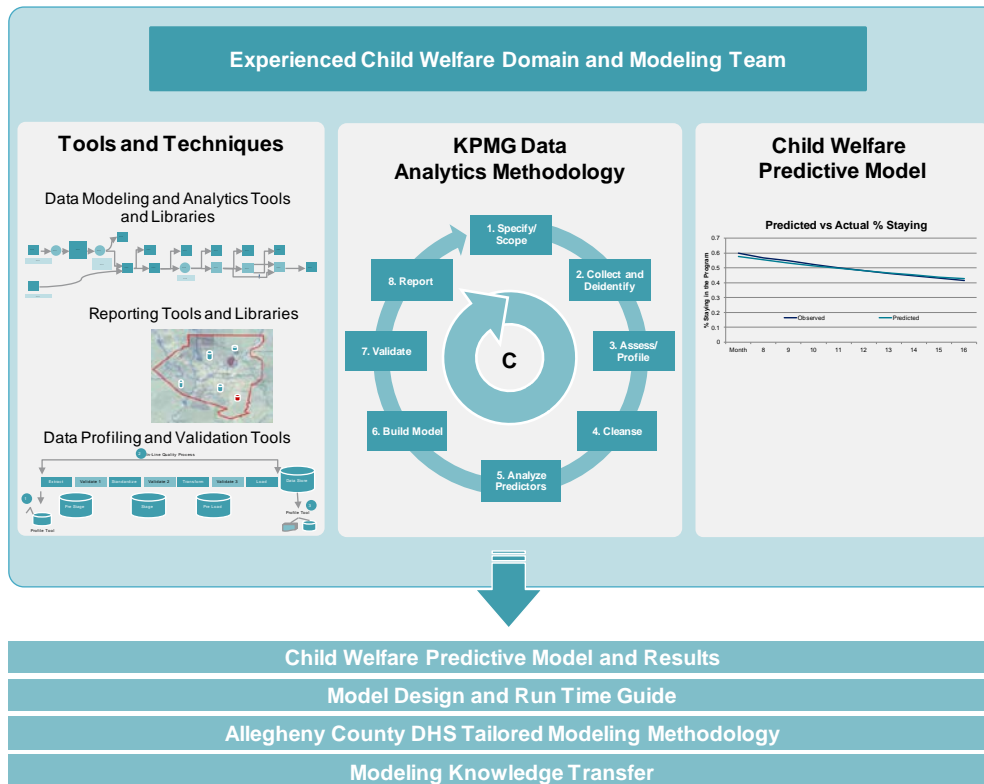
Figure 2: Predictive Model and Analytics Approach

Using our existing predictive model, data analytics methodology, tools, techniques, and libraries, we will deliver a predictive model tailored to the County's needs, an associated model design and run time guide, a modeling methodology tailored for Allegheny County, and knowledge transfer to the County for expanding the model.

Model Description Summary

KPMG owns a predictive model that forecasts the foster care population, its characteristics, and its resource needs over various time horizons. The model uses over 100 predictive variables derived from eight different types of sources. A more detailed description of the model can be found in **Appendix B**.

Model Tailoring Methodology

Our approach for tailoring our predictive model for the County is illustrated in **Figure 3.**
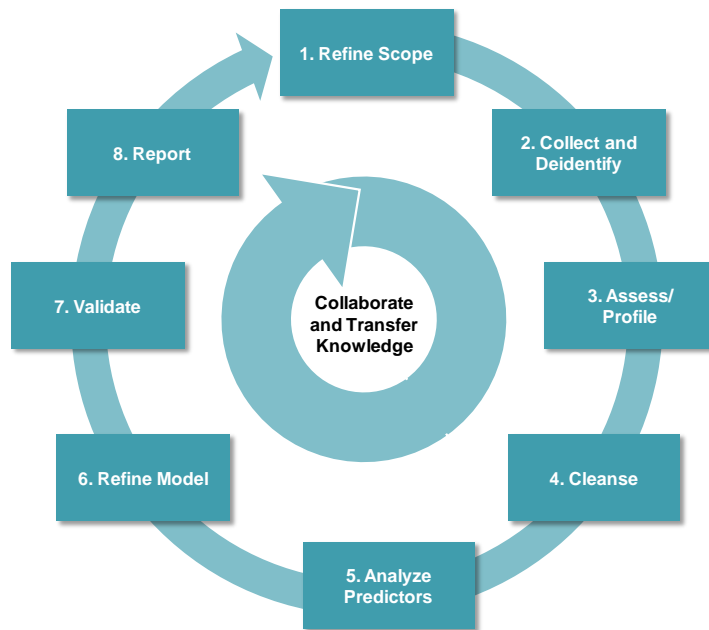
Figure 3 Model Tailoring Approach

Our approach involves the following steps:

- **Step 1 – Refine Scope:** KPMG will review the details of KPMG's baseline predictive model with the County and we will mutually agree on how to best adapt the model using the County's objectives and available data.

  KPMG shall provide a Scoping / Requirements Document as a result of this step. The County is required to sign-off on the Scoping / Requirements Document to confirm your acceptance prior to the commencement of the next step.

  The County is also responsible for providing and determining the data and/or assumptions (inputs) specific to the County that are required for the model. We can help you define the inputs required, and if necessary send you data and assumption templates to complete and return to us. The responsible person from your organization should have overall responsibility for ensuring that the inputs are provided on a timely and consistent basis.

- **Step 2 – Collect and De-identify:** The County will supply us with de-identified Child Welfare, non PII data, agreed to in Step 1, in CSV file format. The County will also supply the team with a description of the data, data relationships, and any business rules governing the data relationships.

- **Step 3 – Assess/Profile:** Our team will perform a first pass at profiling and analyzing the data supplied for defects.

- **Step 4 – Cleanse:** We will review these defects with the County and the County will be responsible for either fixing the defects or removing the defective data from the input data set.

- **Step 5 – Analyze Predictors:** KPMG will evaluate the predictive value of available demographic and/or program history attributes, and evaluate their contribution given the model objectives and implementation considerations.

- **Step 6 – Refine Model:** The initial list of predictive attributes will be refined, to account for potential correlating between predictors.

- **Step 7 – Test:** The draft model will be tested using out-of-sample or out-of-time data provided. The draft model results will be reviewed with the County.

  KPMG will review our testing approach and results with the County. We require that the County agrees that the testing approach is sufficient to meet the County' needs, the Model and its assumptions have been constructed in such a way as to materially meet the County's objectives, and the model has been tested to the County's satisfaction.

Limitations on Testing Activities: The tests conducted during this phase may not constitute a full review or validation of the model developed. No computer model testing method can guarantee that all potential errors have been detected. Accordingly we provide no assurance that the model will not contain any errors.

- **Step 8 – Report and Deployment:** We will generate and review a report on the model findings.

  KPMG will provide the final model to you in a mutually agreed form (e.g., disk, electronic submission, USB stick). KPMG cannot install the model on the County's system; KPMG can provide advice with respect to installation, if necessary.

As we work with the County in executing these steps we will continuously share our approach, methods, techniques, and algorithms with the County to enable the County to refine and extend the model. We will also provide training sessions on the model and the model methodology.

Deliverables and Licensed Materials:

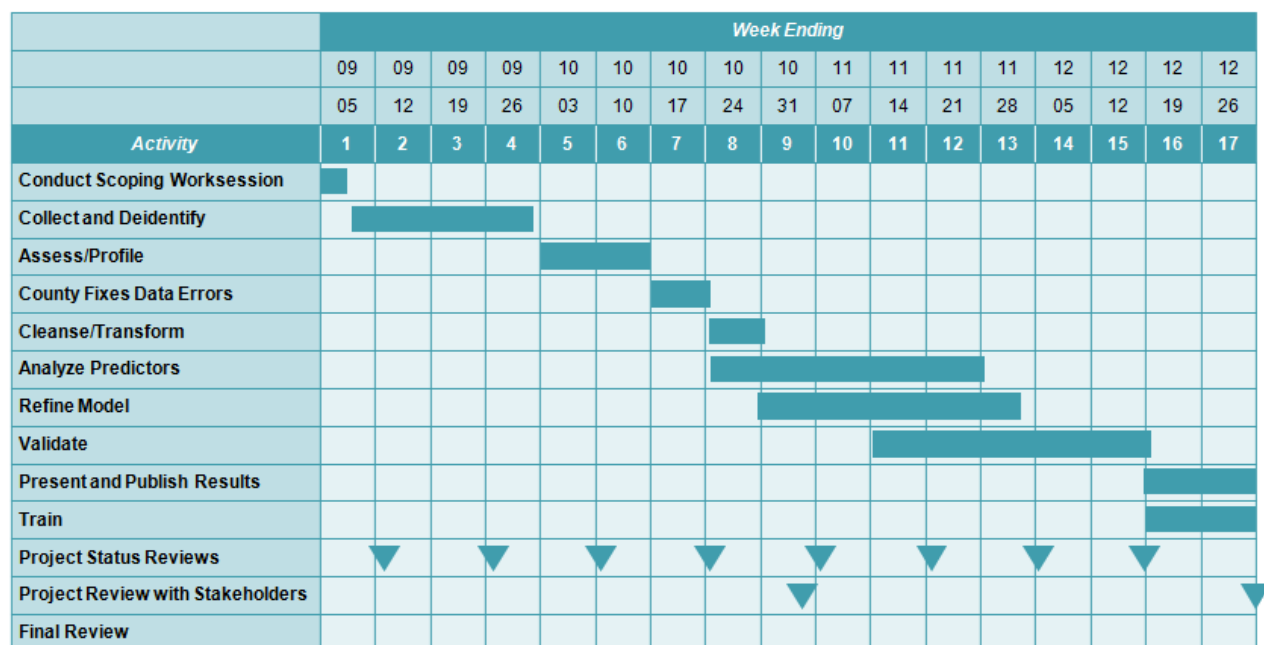**Deliverables** will include the following:

- Project plan in Microsoft Excel or Project format
- Scoping/requirements document in PDF format
- Model testing approach and results in PDF format
- The static model results with the provided data and parameter inputs in PDF format
- A County tailored methodology and approach that can be used to maintain/enhance the model in PDF format
- Two briefing/training sessions on the model and methodology

Licensed Materials include the following:

- The tailored SAS model code
- A model run-time guide in PDF format
- Tailored training material

Project Timeline

The figure below illustrates the estimated schedule for the activities described in our approach.

	Week Ending																
	09	09	09	09	10	10	10	10	10	11	11	11	11	12	12	12	12
	05	12	19	26	03	10	17	24	31	07	14	21	28	05	12	19	26
Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Conduct Scoping Worksession	▮																
Collect and Deidentify		▮	▮	▮													
Assess/Profile					▮	▮											
County Fixes Data Errors							▮										
Cleanse/Transform								▮									
Analyze Predictors								▮	▮	▮							
Refine Model									▮	▮	▮	▮					
Validate											▮	▮	▮				
Present and Publish Results																▮	▮
Train																▮	▮
Project Status Reviews		▼		▼		▼		▼		▼		▼		▼		▼	
Project Review with Stakeholders									▼								▼
Final Review																	

As a result of our experience executing multiple similar types of engagements, using industry better practices, our model, templates, methodology, and seasoned team, we propose completing this engagement in 17 weeks.

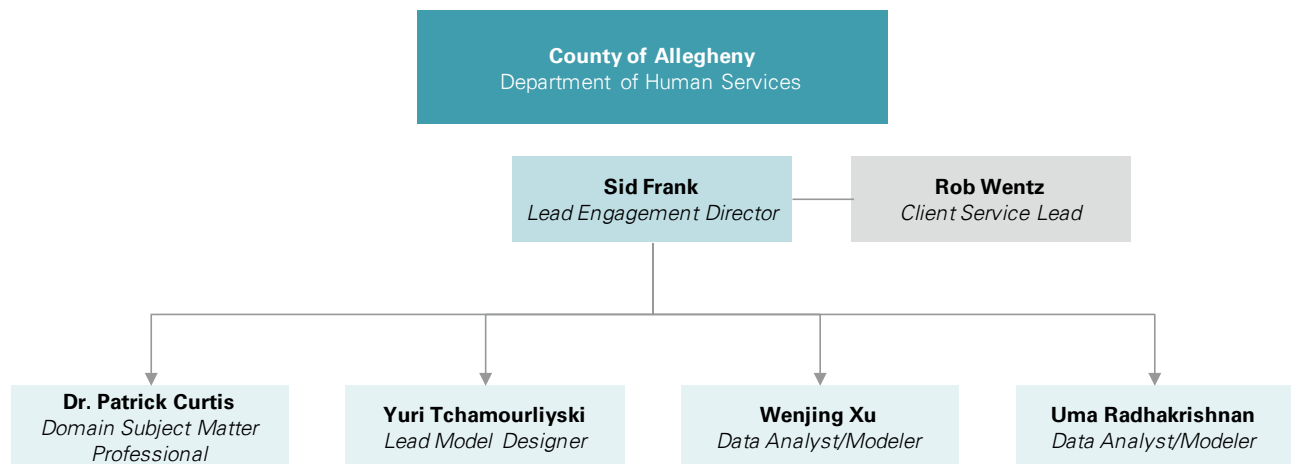## Information Technology and Tools Integration

Our model generates predictive results in tabular format which can easily be integrated into other software tools as required.

Sample Tools

A more detailed description of our model is provided in **Appendix B**.

Proposed Team

KPMG staffs each engagement team with professionals who possess the knowledge, skills, time, and experience to perform the engagement. The organization chart below describes the engagement team structure and roles for each of the engagement team member. Our team structure is founded on the belief that our value to the County is in our senior-level counsel and advice strengthened through many experiences of similar size and scope. In the remainder of this section, we provide a table highlighting our team's experience as well as short biographies of our proposed team members. Detailed résumés are located in **Appendix A**.

Key Personnel	Roles/Experience
Robert Wentz *Client Service Lead*	Rob leads our national information management team for KPMG LLP. He has over 28 years of consulting experience assisting clients to achieve business strategies through the use of technology. Over the last 20 years, he has focused on delivering information management solutions, specifically, performance management, business intelligence and analytics, data warehousing, and enterprise data management solutions.

Key Personnel	Roles/Experience
Sid Frank *Lead Engagement Director*	Sid has over 25 years of experience with data management, business intelligence, and analytics. He was the project lead for the development of the Child Welfare predictive model. He is PMI certified and is the proposed engagement director/project manager for this engagement.
Yuriy Tchamourliyski *Lead Model Designer*	Yuriy has over 10 years experience in projects involving economics, statistics, and financial analysis that require managing and coordinating economic services engagements across multiple lines of businesses and industries. He has extensive experience designing, reviewing and validating statistical models for public sector and commercial clients, as well as developing customized statistical analyses and models. Yuriy led the design of our foster care predictive model and is the proposed modeling lead for this engagement.
Uma Radhakrishnan *Data Analyst/Modeler*	Uma is specialized in performing quantitative data analyses and programming support in a wide range of engagements. She is an experienced consultant with extensive analytical and quantitative skills, including complex econometric modeling and statistical data analyses (including large datasets) in multiple areas. Uma was a key data analyst and modeler for the foster care predictive model and is the proposed data analyst and modeler for this engagement.
Wenjing Xu *Data Analyst/Modeler*	Wenjing is a Senior Associate at KPMG and joined KPMG after completing her Ph.D. degree in Statistics at the Department of Statistics in George Washington University. She is experienced in simulation methods and statistical analysis in SAS, R and STATA. She is working on different KPMG projects related to sampling, statistical analysis, fair lending, predictive modeling, statistical modeling review, and economic analysis. Wenjing was a key statistical analyst and modeler for the foster care predictive model and is the proposed statistical analyst and modeler for this engagement.
Dr. Patrick Curtis *Domain Subject Matter Professional*	Patrick, from our teammate WRMA, has been a researcher, manager, and consultant for more than 25 years in early childhood education, child welfare, and related social services with special experience in the design, funding, and administration of research and evaluation at the national level. He will provide child welfare experience and is the proposed domain subject matter professional for this engagement.

IV. References

Client References

The best measure of client satisfaction can only come from existing or prior clients. Below are references of clients who are willing to discuss the quality of the work provided by these team members and by our firm's practice in general. KPMG highly values our clients' effort and time to provide support, so please contact KPMG to efficiently coordinate contact with our references.

Client	Timeframe	Service Provided
New York City Administration for Children's Services – Foster Care Predictive Model Peter Nabozny *Associate Commissioner* Email: Peter.Nabozny@dfa.state.ny.us	8/2013-03/24/2013	▪ Model requirements scoping ▪ Analysis of ACS provided data of foster care children mix, investigations, allegations, family service history, and movements ▪ Predictive model design ▪ Predictive model testing ▪ Predictive model delivery and forecast result
Gender Equity Ms. Jennifer Bécherel *Senior Policy Analyst* Email: Jennifer.Becherel@aadnc-aandc.gc.ca	8/2012–12/2012	▪ Reviewed and assessed program estimates ▪ Within AANDC, 10 programs were identified by the department as programs that were impacted by newly registered individuals under Bill C-3 ▪ KPMG was retained to provide updates on the dynamic costing model and a simulation model based on assumptions supporting the costing model ▪ Department included a registration forecast to the model, which was not part of the forecast in 2010
New York City Administration for Children's Services – ACS INFO Diane Gilroy *Director* Email: Diane.Gilroy@dfa.state.ny.us	11/1/2011-1/17/14	▪ Data Warehouse/Business Intelligence Implementation Planning ▪ Systems Integration, Vendor Selection Assistance ▪ Project Implementation Monitoring Services ▪ Quality assurance services

V. Budget and Budget Description

Professional Fees

KPMG recognizes the importance of providing cost-effective services. Accordingly, we will leverage our baseline model, methodology, and template accelerators and our experienced staff to provide high-value solutions within the County's budget constraints.

Fee Table Breakdown

The following estimated fees are based on our experience with engagements of similar scope and the assumption in the following paragraphs.

Line Item	Estimated Price
Customized Model Code	$ ███
Model Run Time Guide	███
Model Results Report	███
County Tailored Data Analytics Methodology	███
Training Sessions	███
Model License	███
Total Estimated Fees and License	$ ███

County Responsibilities and Assumptions

During the development of this proposal, we have been guided by certain assumptions about the project scope, the estimated time schedule, and level of involvement and support of the County. We will require the support of County personnel in order to achieve timely completion of the project. Support includes, but is not limited to, the collection of all relevant documents (paper or electronic) and data, and the scheduling of interviews and coordination of meetings. The proposed timeline and fees are based upon the following assumptions (note any changes may impact the delivery timeline). Additionally, any changes to scope, time, or fees will be documented and submitted in advance to the County's project sponsor for approval.

County Responsibilities

■ **Client Project Management:** The County will designate a management-level individual with the requisite skills and competencies to oversee the conduct of this project, including coordination of needed County resources, scheduling of interviews and work sessions, and the review of draft deliverables. County personnel assigned to the project will review and approve draft deliverables on a timely basis.

■ **Access to Systems/Data Files:** The County will arrange and grant access to the KPMG team member to any online documents or data necessary to complete this engagement. Access will be granted within the first three weeks of the project.

■ **Inputs to Model:** The County will provide input data files in the timeframe depicted in the schedule and as described in our approach. KPMG will review the data and document any defects. The County will then fix the defects or delete the data from the input data set.

■ **Quality Assurance:** County personnel assigned to the project will be suitably skilled to review recommendations and sign off on all deliverables.

Deliverables Acceptance

■ As detailed in the project approach above, KPMG will require the County to review, and approve on a timely basis, our Deliverables at their completion in the project process. Upon KPMG's provision of the final Deliverables to the County as specified in the Deliverables section, the County shall have five (5) business days after provision of final Deliverables, or such other period as may be mutually agreed upon to provide feedback to KPMG regarding the Deliverables, otherwise the Deliverables shall be considered accepted by the County.

■ The deliverables presented as part of this engagement are for the internal use of County management, the Audit Committee and Board of Directors.

Model Acceptance Procedures

■ On completion of testing, The County shall have a period of 15 days following the model being made available to The County (Approval Period) to confirm that the model meets the requirements stated above. The County shall either provide its written acceptance of the model to KPMG during the Approval Period or written notice to KPMG specifying in reasonable detail any nonconformity. Any nonconformity reported by The County during the Approval Period will be fixed by KPMG, and The County will have an additional 15 day Approval Period for acceptance. If The County does not report any nonconformity during an Approval Period, the model as made available will be deemed to be accepted by The County. Upon acceptance of the model, KPMG shall have no further liability or obligation relating to your use of the model.

License Agreement

■ The Licensed Materials developed and provided as described herein are subject to the terms of the License Agreement attached hereto as Attachment A.

General Assumptions

■ The engagement will commence on or about September 1, 2014.

■ The model scoping session will occur within the first two weeks of the engagement.

■ The County will supply all available documents/artifacts to be reviewed within the first two weeks of the engagement.

■ The work week is assumed to be 40 hours and the 4/5 work week schedule (i.e., one day per week spent offsite) will be utilized, excluding holidays and scheduled vacations. In the event necessary, we will mutually agree upon changes to this schedule.

■ KPMG will provide the services during normal business hours, Monday through Friday, except holidays. If necessary, the County will provide KPMG with after hour's access to the County's facilities. Out of town personnel may work hours other than those defined as normal business hours to accommodate their travel schedules.

■ Work locations will be the County's DHS location in Pittsburgh, PA and KPMG offices.

■ The County will provide all necessary information, tools, and rights of use for our personnel and other resources, which we require to deliver the requested services.

Other Matters

■ The advice, recommendations, work product, and deliverables (collectively, the "deliverables") provided as part of this engagement will be developed for the County, and are not intended for use by any other party or for any other purpose, and may only be relied upon by the County and will be so marked. We disclaim any intention or obligation to update or revise our deliverables whether as a result of new information, future events, or otherwise. Should additional documentation or other information become available which impacts upon the deliverables, we reserve the right to amend our deliverables, accordingly.

- KPMG's services as outlined in this proposal constitute an advisory engagement conducted under the American Institute of Certified Public Accountants (AICPA) Standards for Consulting Services. Such services are not intended to be an audit, examination, attestation, special report or agreed-upon procedures engagements as those services are defined in AICPA literature applicable to such engagements conducted by independent auditors. Accordingly, these services shall not result in the issuance of a written communication to third parties by KPMG directly reporting on financial data or internal control or expressing a conclusion or any other form of assurance.
- The County agrees that KPMG may list the company as a customer in its marketing materials. In addition, the County gives KPMG the right to use the County's logo on documents prepared for the County internally (e.g., internal presentations, etc.).

Terms and Conditions

KPMG's participation on this project is subject to the successful negotiation and agreement of mutually acceptable terms and conditions. We have reviewed your sample agreement and we are confident that if selected we will be able to come to mutual agreement on terms and conditions. Examples of additional terms KPMG would seek to include in a subsequent agreement include:

- **Limitation of Liability** –Notwithstanding anything else herein to the contrary, the liability of KPMG (Service Provider) on account of any actions, damages, claims, liabilities, costs, expenses or losses in any way arising out of or relating to the services performed under the Agreement shall be limited to the amount of fees paid or owing to Service Provider under the Agreement. In no event shall Service Provider be liable for consequential, special, indirect, incidental, punitive or exemplary damages, costs, expenses, or losses (including, without limitation, lost profits and opportunity costs). This section shall apply regardless of the form of action, damage, claim, liability, cost, expense, or loss asserted, whether in contract, statute, tort (including but not limited to negligence) or otherwise and shall survive termination or expiration."

- **Management Responsibility:** KPMG's services may include advice and recommendations; but all decisions in connection with the implementation of such advice and recommendations shall be the responsibility of, and made by, the County. KPMG will not perform management functions or make management decisions for the County.

- **Communication:** KPMG may communicate with the County by electronic mail or otherwise transmit documents in electronic form during the course of this engagement. The County accepts the inherent risks of these forms of communication (including the security risks of interception of or unauthorized access to such communications, the risks of corruption of such communications and the risks of viruses or other harmful devices) and agrees that it may rely only upon a final hardcopy version of a document or other communication that KPMG transmits to the County. KPMG will exercise the same level of care to protect the County's information under this engagement as KPMG exercises to protect its own confidential information but in no event less than reasonable care.

- **Active Spreadsheets and Electronic Files:** KPMG may use models, electronic files, and spreadsheets with embedded macros created by KPMG to assist KPMG in providing the services under the Contract. If the County requests a working copy of any such model, electronic file or spreadsheet, KPMG may, at its discretion, make such item available to the County for the County's internal use only and such item shall be considered a deliverable (subject to the requirements herein); provided that the County is responsible for obtaining the right to use any third party products necessary to use or operate such item.

- **County Vendors:** The County is aware that KPMG may be providing assurance, tax and/or advisory services to other actual or potential vendors of the County. KPMG will perform an internal search for any potential client conflicts relating to any of the City's vendors identified by County as having a role in connection with KPMG's performance of this Agreement. The County hereby agrees that a vendor's status as a KPMG client does not impact KPMG's engagement to perform this Agreement KPMG will advise the County of any conflicts of interest that could prevent it from performing the Agreement. However, KPMG is a large firm that is engaged by new clients on a daily basis and as a result it cannot guarantee that, following its conflict search, an engagement for any other related party will not be accepted somewhere else in KPMG's firm. Should any new information come to KPMG's attention, KPMG will promptly inform the County. KPMG shall perform this Contract in accordance with applicable professional standards.

- **Use of Vendors:** The County acknowledges that in connection with the performance of services under the Agreement, KPMG may use the services of KPMG controlled entities and/or KPMG member firms to complete the services required by this Agreement. The County also acknowledges that in connection with the performance of services under the Agreement, KPMG uses vendors within and without the United States to provide at KPMG's direction administrative and clerical services to KPMG. These vendors may in the performance of such services have limited access to information, including but not limited to confidential information, received by KPMG from or at the request or direction of the County. KPMG represents to the County that each such vendor has agreed to conditions of confidentiality with respect to the County's information to the same or similar extent as KPMG has agreed to pursuant this Agreement. KPMG will have full responsibility to cause these vendors to comply with such conditions of confidentiality and KPMG shall be responsible for any consequences of their failure to comply. Accordingly, the County consents to KPMG disclosure to a vendor and the use by such vendor of data and information, including but not limited to confidential information, received from or at the request or direction of the County for the purposes set forth herein.

Our acceptance of this engagement is contingent upon KPMG and the County's ability to reach mutually agreeable terms and conditions.

Appendix A – Résumés

Client Service Lead

Background

Robert is a Managing Director in the Advisory Services Group of KPMG LLP (KPMG). He has over 28 years of consulting experience in the application of advanced computer technology and architectures to achieve business strategies. Prior to joining KPMG in November 2010, he was a Managing Director at PwC, BearingPoint and KPMG Consulting delivering Information Management solutions.

Professional and Industry Experience

His experience crosses the full project life cycle including strategies, functional analysis, design, development, and implementation of information systems solutions, standard and rapid application development methodologies, project planning and management, solution architectures, and enterprise data management. For the past 18 years, he has had focus on delivering Information Management Solutions, specifically, Performance Management, Business Intelligence, Data Warehousing, and Enterprise Data Management Solutions.

These types of engagements have been focused on developing effective approaches to:

- Support user driven Business Intelligence
- Enterprise information management solutions
- Data and information governance solutions
- User driven master and meta data management
- Metadata management
- Business and process governance solutions

His experiences resulted in working with other practitioners at BearingPoint developing a common approach and methodology to information management, MIKE2.0 that was released as open source, at openmethodology.org.

Representative Experience

- Lead the team to design, develop, and implement an environment to support growth and perform sales, assets, and flows analysis for one of the world's largest privately held investment management organizations with assets totaling about one trillion dollars under management. The client needed an enterprise data management, reporting and analysis solution to support marketing sales, and services business insight. The solution resulted in a unified data integration environment that was scalable and resulted in faster time to market analytics to support future business integration and expansion.

- Directed the architecture, design, development of a solution to support improved information/data management, reporting, and analytics distribution division of a financial investment management firm. The project is integrating both institutional and broker/dealer information to perform analysis across investments, geography, business unit, intermediary, and resources.

- Directed the architecture, planning and managed the design of a Financial Data Warehouse Blueprint, and Reporting Environment for premier investment banking client. The project was based on providing monthly financial management and daily positional profit and loose reporting for the Controllers organization. The final blueprint supported Web-enabled reporting and analysis.
- Directed the definition of requirements and design for the planning and reporting functions to provide integrated planning and reporting for a healthcare benefits provider. The FP&A effort encompasses reporting and analysis for actual to budget and forecast planning applications. In addition, a planning application will accommodate detailed planning and analysis for budgeting and forecasting. These applications will dramatically improve financial reporting and analysis and enable the organization to spend more time on analysis.
- Directed the program management, planning, design, development, and implementation for an integrated Business Intelligence solution to support insurance claims processing reporting and analysis for an auto industry client.
- Directed the program management of the analysis and design of a detailed program for master data management for a specialty materials division of our client.
- Directed a project team and primary lead for the development of a Financial Governance Framework for an insurance Finance Group. The governance framework model was developed leveraging the core data management framework model and methodology. The model was customized for the Finance Team to better allow them to manage their data definitions, business rules, and reporting definitions on a global basis as required to support the single instance of the client's core financial applications.
- Planned, designed, and managed efforts to develop and implement an International Credit Risk Management and Financial Consolidation and Reporting environment.
- Program management and lead architect to support our client's efforts of a variety of near-term and longer-tem objectives that require the integration of a series of unique projects under the program. The Financial Reporting and Control project's primary function was to re-architect the back-office finance, reporting, and analysis functions for the client.
- Program management and lead architect to assist our client with the design of a future state environment to support the clients Funding & Investment accounting division. The project is based on providing an improved data integration from the front office trading systems through to the accounting sub-ledger and on to the corporate general ledger system.

- Directed the architecture and management, for the design, development, and implementation of a global data warehouse to support the consolidation and analysis of nearly 1 million customers. Further, the warehouse delivered the ability to understand channel and product performance on a global basis. Specific applications include the proactive identification of global customers and the understanding of how value-added products are performing. The system showcased multiple data warehousing products to consolidate global customer information from over 30 countries using the D&B D-U-N-S Number. D&B products were also used to supply demographic attributes to customers for market segmentation and analysis.
- Architected and project managed implementation of a global financial consolidation and reporting system for a premiere online services company. This project included facilitating the definition of the organization's financial consolidation, planning and reporting process requirements, design, development, and implementation of a system to enable the process.
- Architected, planned, and managed the design of a Financial Data Warehouse Blueprint and Reporting Environment for premier investment banking client. The project was based on providing monthly financial management and daily positional profit and loose reporting for the Controllers organization.
- Architected and project managed implementation of a budgeting system for a FORTUNE 500 pharmaceutical company.
- Directed the definition of strategy, design, and development for a customer and product profitability global data warehouse to including information from over 30 countries including North America, Europe, and Asia Pacific.
- Planned, designed, and managed efforts to develop a prototype for the future implementation of an integrated SAP data warehouse and decision support environment.
- Planned and managed all efforts to design, develop, and implement and enterprise-wide reporting environment for an international chemical company based on SAPs Information Warehouse.

Publications

- Master Data Governance, Model & the Mechanism, white paper

SID FRANK
Director

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Function and Specialization
Sid is a member of the IT Advisory practice specializing in large-scale data management, knowledge management, and business intelligence projects.

Education, Licenses & Certifications

- Executive MBA degree, Temple University
- MSE degree, University of Pennsylvania State
- BEEE degree, City University of New York
- Project Management Professional Certified, Project Management Institute

Lead Engagement Director

Background

Sid is a Director in KPMG's IT Advisory Services practice. Over 30 years of managing, developing, and delivering high-value business solutions have provided him with a multitude of management skills and experience. Fifteen years were focused on providing solutions to the public sector. Fifteen additional years were in commercial sectors, including, healthcare, financial services, transportation, automotive manufacturing, high-tech manufacturing, telecommunications, and pharmaceuticals.

Professional and Industry Experience

During his 30 years, Sid has designed, led, and managed the delivery and deployment of large scale, knowledge management, data management, and business intelligence systems which have provided high ROI to clients.

As a result of his experience, Sid has developed inclusive successful program management and design processes for the various challenges of these projects including:

- Aligning BI and data management programs/projects with strategic goals and achieving measurable results
- Managing/controlling and reducing multiple copies of Master Data and Metadata
- Designed and implemented master data governance programs and strategies and developed a data governance/quality assessment tool
- Large, complex, data integration between multiple systems
- Data transformations between heterogeneous environments
- Achieving data quality targets with multi-grade quality source systems
- Achieving end-user service levels while maintaining regulatory and security controls

Publications and Speaking Engagements

- "The Importance of Data Quality in Service-Oriented Architectures, Are You Being Served?," March 2007
- "Service Level Agreements for Data," June 2006
- "Six Sigma Data Quality Processes", B-EYE Network, May 2006
- "The Partnership of Six Sigma and Data Certification", B-EYE Network, January 2006
- "An Introduction to Six Sigma Pricing", Journal of Revenue and Pricing Management and Professional Pricing Society Publications, September 2002
- "What's in a Price: Losing Earnings Through Price Confusion", Professional Pricing Society Publications, September 2001

YURIY M. TCHAMOURLIYSKI

Senior Manager

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Function and Specialization
Yuriy supports clients with sophisticated analyses related to statistical and economic modeling primarily within the financial services sector.

Professional Associations
- American Economic Association

Education, Licenses & Certifications
- PhD degree, economics, Boston College
- MA degree, economics, Boston College
- BA degree, economics, American University in Bulgaria

Background

Yuriy is a Senior Manager in KPMG's Economic and Valuation Services practice. He has over 10 years experience in projects involving economics, statistics, and financial analysis.

Professional and Industry Experience

Yuriy has substantial experience managing and coordinating Economic Services engagements across multiple lines of businesses and industries. He has extensive experience reviewing and validating statistical models for public sector and commercial clients, as well as developing customized statistical analyses and models.

Predictive/Fraud/Compliance Modeling and Sampling

- Recently lead a team developing a model predicting the types of services needed, and number of slots needed by a Large Local Government Agency. The model is anticipated to be used by the Agency as part of its forward looking budgeting and internal planning decisions.

- Assisted a large Government Agency with enhancing a developing additional empirically derived business rules and scoring models to identify higher fraud risk cases.

- Assisted numerous financial institutions and other entities with statistical and data analytics experience in terms of identifying testing populations, relevant segmentations, stratifications, sample size determinations and sampling, and identification of harmed consumers as part of large data scrubs or file reviews for regulatory compliance related to DOJ/OCC/CFPB.

- Assisting a local government with developing a predictive model around the types and number of services it needs to provide 12 months into the future.

Model/Valuation Reviews

- Reviewed and critiqued the econometric models used by a large Government Agency to determine the capital adequacy of its various Mortgage Insurance Funds. The review was focused on the methods for predicting the number of defaults and prepayments in mortgage loan portfolios, in addition to evaluating the documentation support for the assumptions used, and year-to-year model changes. The review also examined the relationships between the portfolios' economic value and various macroeconomic variables over the life of loans insured by the Fund.

- For the last four years, managed the review of the methodology and validity of the cash flow models used by a large Federal Agency to estimate the subsidy cost of its major loan programs. The focus of the review was the reasonableness of the assumptions, documentation, and calculation used to support for the subsidy cost estimates.

- For the last five years, managed, reviewed and critiqued the documentation, assumptions, models, and model estimates used by a large Federal Agency to determine the capital adequacy of its various lending programs. The review focused on the methods for calculating defaults and prepayments of the Agency's loan portfolios, as well as assessing the relative reasonableness of the risk grades used by the Agency to manage and price the risk associated with these loans.
- Reviewed and advised on the validity of a status-based default model used by the nation's leading provider of student loans. Provided analytical and technical experience related to the reasonableness of the assumptions, model implementation, and model documentation.
- Assisted a large Federal Agency with a review of its program to provide home loan financing to low and very low-income citizens. Additionally, reviewed the associated model used to estimate the cost of these loans.
- Assisted a large Federal Agency with a management review of its operations. As part of the project, was tasked with developing various cash flow scenarios associated with different staffing patterns and identifying areas for potential cost savings.
- Assisted a major investment bank with financial and economic analysis of cash flows from a proposed public-private partnership involving construction of new facilities.

Fair Lending Statistical Analyses

- Over the years has managed multiple teams supporting Advisory file review teams with statistical and data analytics experience in terms of identifying testing populations, relevant segmentations, stratifications, sample size determinations, and sampling. Recently managed teams providing statistical and data analytics assistance on various DOJ/OCC/CFPB look back file reviews.
- Managed the review of close to 300 models used by one of the largest financial institutions in the United States for potential fair-lending risk exposure. Performed disparate impact model attribute testing.
- Currently, assisting a major national lender with sampling and statistical data support related to SCRA protection, analysis and identification of potentially impacted populations, and potential remediation considerations.
- Assisted several major national lenders with statistical support related to sampling, and identification of potentially consumer harm.
- Assisted a large student lender with CFPB exam preparation.
- In anticipation of litigation, developed an econometric analysis of mortgage pricing for a national mortgage lender. The analysis demonstrated that pricing variations resulted from valid business considerations and differences in borrower and loan characteristics.

- Analyzed the U.S. mortgage portfolio of a global financial services provider for fair-lending risk exposure. Project scope included a statistical analysis of pricing, underwriting, as well as an analysis of lending patterns to evaluate possible differential treatment of certain minority groups across mortgage products and geographies.
- Analyzed the loan portfolio of a major U.S. mortgage lender for fair-lending risk exposure. Developed and implemented pricing and underwriting regression models. Implemented benchmark overlap file matching and selected file for file review. Prepared status briefings and final report.
- Analyzed the indirect auto loan portfolio of a major U.S. financial services company for fair-lending risk exposure. Developed and implemented statistical analyses studying potential disparate lending and pricing patterns. Prepared status briefings and final report.
- Assisted a major mortgage lender with a statistical analysis of its HMDA-reportable applications and loans. Developed and implemented statistical underwriting and pricing models based on client's underwriting and pricing guidelines.
- In a multi-year project, assisted one of the largest U.S. originators of home loans to monitor and manage its regulatory, legal, and reputational fair lending risk. Developed and implemented statistical analysis to review the underwriting and pricing of single-family home loans, multi-family home loans, and home equity loans. Reviewed underwriting guidelines, pricing guidelines, and credit scoring models. Implemented benchmark overlap file matching and selected file for file review.

Selected Other Projects

- Assisted in the design and implementation of a city-wide survey of students, parents, and teachers in one of the largest U.S. public school system.
- Assisted in the design of a national survey studying the size and distribution of a particular business sector. Analyzed survey results and built models projecting sector revenues and number of businesses. Prepared status briefings and final report.
- Assisted a large Federal Agency with a management review of its operations. As part of the project, was tasked with developing various cash flow scenarios associated with different staffing patterns and identifying areas for potential cost savings.
- Valued the loan portfolio of a large automotive lender. Forecasted the amount of loan repayments, the amounts and timing of other loan collections, and costs to the lender.
- Developed a statistical model to predict the frequency of computer failure rates and the associated monetary costs. The model was used by a major PC manufacturer to value its worldwide financial obligations resulting from repairs of in-warranty machines across the entire spectrum of its consumer product offerings.

- Developed and reviewed valuations of employee stock options.
- Assisted multiple federal and commercial clients with designing and implementing statistical sampling methodologies used by KPMG's audit teams.
- In the course of graduate studies at Boston College: conducted econometric research using Monte Carlo simulations; developed and estimated an innovative international trade model; developed and estimated a wage growth model using modern econometric methods; compiled a large dataset of determinants of wages and incomes from a large survey.

Technical Skills

SAS, STATA, Matlab, Gauss, Microsoft Office

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Function and Specialization
Uma is a member of the Economic and Valuation Services practice specializing in Economic Consulting and Transfer Pricing services.

Education, Licenses & Certifications

■ PhD degree, economics, University of Virginia

■ MA degree, economics, University of Virginia

■ BA degree economics and mathematics, Adelphi University

Background

Uma is a Senior Associate in KPMG's Economic and Valuation Services practice. She started working at KPMG in April 2013, prior to which she was employed as an economist with PricewaterhouseCoopers LLP and the U.S. Census Bureau. Her areas of experience include applied microeconomics, labor economics, econometrics, and economic development. In addition, She has taught undergraduate and graduate economics courses at the University of Virginia

Uma is specialized in performing quantitative data analyses and programming support in a wide range of tax engagements. She is an experienced consultant with extensive analytical and quantitative skills, including complex econometric modeling and statistical data analyses (including large datasets) in multiple areas. She is experienced in providing Transfer Pricing services that include assisting companies in documenting transfer pricing policies for products, services, and intangibles based on Treasury Regulations §482 and OECD guidelines. Her technical skills include SAS, Stata, Fortran 95, Microsoft Visio, Microsoft PowerPoint, and Microsoft Excel.

Professional and Industry Experience

KPMG April 2013- Present

■ Involved in developing a predictive model for a foster care agency to predict the number of slots needed several months/years into the future. Leveraged client-provided data, such as data cleaning, reformatting, and merging. Developed some customize programs to run the model and perform model validation along with forecasting. The purpose is to provide the agency with a breakdown of the population and duration of stay for children in care and in coming.

■ Analyzed the employment, income and fiscal impacts of an internet retail company in Illinois on the state economy.

■ Quantified the employment, income, and fiscal impacts of a music company on the County economy.

■ Involved in assisting a large U.S. bank with the design and implementation of statistical monitoring of its fair lending risk exposure across multiple business segments including underwriting and pricing.

■ Assisted in transfer pricing planning and documentation projects to determine the proper arm's-length compensation for tangible property, intangible property, and services based on both U.S. and OECD transfer pricing regulations.

■ Assisted in numerous transfer pricing audit assists.

■ Involved in estimating the economic impacts of a proposed launch pad and supporting infrastructure on the local economy.

- Assisted on numerous valuation audit assists with particular focus on stock option valuations, testing the assumptions such as historical and implied volatility, risk free rate, and expected term.

PricewaterhouseCoopers June 2011- April 2013

- Developed and estimated empirical economic models that focus on the impacts of changes in government policy on different segments of the economy using datasets from private and government sources.
- Performed data analyses and provided tabulations of datasets pertaining to client business and industry.
- Involved in conducting research and writing proposals for potential projects.
- Prepared presentation detailing economic analyses and summarizing datasets for internal and external clients.
- Taught and contributed content to several team workshops.
- Assisted companies in documenting transfer pricing policies for products, services, and intangibles based on Treasury Regulations § 482 and OECD guidelines.
- Conducted public database searches, analyzed licensing agreements, SEC form 10Ks, government publications, and business journals to calculate arm's length price.
- Assessed client's industry and business through extensive industry, economic, financial, and market research.
- Designed questionnaires and conducted client interviews to gather information used to identify the client's pricing issues.

U.S. Census Bureau June 2009- April 2011

- Supervised a team of economists and quality assurance analysts for a 2011 Federal Budget Initiative Project.
- Contributed to enhancing and creating U.S. Census Bureau data products, particularly the Quarterly Workforce Indicators maintained by Census Bureau's Center for Economic Studies.
- Drafted specifications, requirements documents, and instructional guides for economists and programmers.
- Reviewed external research proposals submitted to U.S. Census Bureau's Research Data Centers.
- Participated in recruiting of economists.
- Awarded Special Achievement Award for excellent leadership and work on leading efforts to integrate information on firm age and size information to the Longitudinal Employer Household Dynamics (LEHD) infrastructure, August 2010.

WENJING XU
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Function and Specialization
Wenjing specializes in statistical analysis, for example, survival analysis categorical analysis, simulation methods and data analysis.

Education, Licenses & Certifications
- PhD degree, statistics, George Washington University
- MA degree, statistics, Nankai University, China
- BA degree, statistics, Sichuan University, China
- Passed four Associate of the Society of Actuaries exams: Probability, Financial Mathematics, Financial Modeling, and Construction and Evaluation of Actuarial Models

Data Analyst/Modeler

Background

Wenjing is a Senior Associate at KPMG and joined KPMG after completing her PhD degree in Statistics at the Department of Statistics in George Washington University. She is experienced in simulation methods and statistical analysis in SAS, R and STATA. She is working on different KPMG projects related to sampling, statistical analysis, fair lending, predictive modeling, statistical modeling review, and economic analysis.

Professional and Industry Experience

- Involved in developing a predictive model for a foster care agency to predict the number of slots needed several months/years into the future. Leveraged client-provided data, such as data cleaning, reformatting and merging. Developed some customize programs to run the model and perform model validation along with forecasting. The purpose is to provide the agency with a breakdown of the population and duration of stay for children in care and in coming.

- Involved in reviewing statistical modeling, such as linear regression, logistic regression and mixed models for an aircraft company, which includes reviewing the data source, the modeling methodology, the reasonableness of the model and the model performance.

- Successfully defended her dissertation, i.e., Statistical Properties of Biostatistical Methods for Correlated Processes to Data Arising in the Legal Settings, and obtained the Ph D degree in Statistics. She programmed in SAS and R for Monte-Carlo EM algorithm, to assess the power of several tests and developed two adaptive procedures for different interests of testing hypotheses.

- Served as a lecturer at George Washington University for Introduction to Business Statistics, Applied Times Series Analysis and Statistical Computing Packages, covered topics such as linear regression, logistic regression, ANOVA, time series forecasting and programming in SAS, R. Wenjing also worked as a teaching assistant at George Washington University, where she developed R codes for some categorical analysis methods, such as power calculation of Fisher's exact test, Breslow-Day test.

- Assisted with a cohort study planning at center for health risk evaluation, formulating statistical problems for assessing effects of a possibly toxic chemic, organized, cleaned the collected large longitudinal datasets, analyzed possibly elevated cancer risks of the cohort, and calculated the standardized mortality ratios (SMRs).

- Worked as an Intern at FDA to clean, organize and merge several large databases to recreate a new database suitable for analysis, provide statistical assistance, such as meta-analysis, mixed modeling, and programmed in R & SAS, for different drug effects comparison.

- Worked as a project analyst at one of the two largest wireless service providers in China, on a user loyalty project, in which different tree and regression models were built and tested using SAS Enterprise and SAS Macro.

Technical Skills

- Proficient in statistical data analysis programming, such as, R, SAS, and STATA.

Publications and Achievements

- Xu, W., Pan, Q. and Gastwirth, J.L. (2013). Adaptive procedures for nested processes: Application to equal employment. Statistics & Its Inference, 6(4): 1-13.

- Xu, W., Pan, Q., & Gastwirth, J. L. (2014). Cox proportional hazards models with frailty for negatively correlated employment processes. Computational Statistics & Data Analysis, 70, 295-307.

- Kimbrough, R.D., Krouskas, C.A., Xu, W. and Shields, P. (2014). Mortality among Capacitor Workers exposed to polychlorinated biphenyls (PCBs), a long-term update. (Appearing in International Archives of Occupational and Environmental Health).

- Washington Statistical Society Outstanding Graduate Student Award, Washington Statistical Society, 2012.

PATRICK A. CURTIS
Vice President

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Function and Specialization
Patrick has dedicated his career to advancing the use of empirically based knowledge in the human services, in promoting the use of research-based leading practices, and in supporting the conduct of research and evaluation activities in service providing agencies.

Education, Licenses & Certifications
- PhD degree, University of Illinois
- MSW degree, University of Illinois
- BA degree, University of Illinois

Background

Patrick has been a researcher, manager, and consultant for more than 25 years in early childhood education, child welfare, and related social services with special experience in the design, funding, and administration of research and evaluation at the national level. His work has had direct bearing on policy formulation, program assessments, analysis and utility of data, as well as in the provision of technical assistance to state, local, and private, not-for-profit agencies. At Walter R. McDonald & Associates he has served as Senior Research Manager from 2001 to 2007 and Vice President from 2008 to 2012.

Patrick has dedicated his career to advancing the use of empirically based knowledge in the human services, in promoting the use of research-based leading practices, and in supporting the conduct of research and evaluation activities in service providing agencies. He has published professionally in early childhood education, child abuse and neglect, foster care, outcomes and leading practices, quantitative and qualitative research methods, and cultural competency. His two most recent books are the edited *What Works in Child Welfare and the Foster Care Crisis*.

Professional and Industry Experience

Since joining WRMA, Patrick has worked on the following projects:

- **Fulton County, State of Georgia, Operational Review and Assessment of the Health and Human Services Agency. (2012):** WRMA, in teaming with KPMG, LLP (KPMG), is assessing the county's progress toward the provision of integrated services. The services include public health, behavioral health, workforce development, housing, and aging services. Patrick is part of the data collection team conducting document review, key informant interviewing, and site visits. He is also assisting in data analysis, identification of findings, and writing the Leading practices section of the final report.

- **U.S. Department of Health and Human Services, Administration on Children, Youth and Families (ACYF), Examining Child Fatality Review Teams and Cross-System Fatality Reviews to Promote the Safety of Children and Youth at Risk :** WRMA, in partnership with the National Center for the Review and Prevention of Child Death, was awarded a contract to review and analyze recommendations and outcomes child death review teams at both the local and state levels. Patrick is task leader for all dissemination of findings.

- **U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, Evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program:**

WRMA and ICF Macro form the national evaluation team, with WRMA serving as the prime contractor on Phase V of the national evaluation and as the principal subcontractor on Phases VI and VII. Each funded community provides system of care services and hires a local evaluator to participate in the national evaluation. The national evaluation data collection protocol includes longitudinal interviews with caregivers of children receiving services and youth ages 11−19, site visits to assess system of care implementation, and abstraction of services and costs data from grantee database systems. National evaluation activities incorporate training and technical assistance for local evaluators regarding their national evaluation data collection activities, as well as design and implementation of special studies covering community use of evidence-based practices, cultural and linguistic competence of systems of care, and community continuous quality improvement efforts.

- As part of Phase VI, the national evaluation includes a sector-specific comparative study for youth and families involved with the child welfare, juvenile justice, and education systems. Beginning in 2011 Patrick serves as Principal Investigator for the child welfare sector study. The study assesses differential outcomes of children and families involved in child welfare and receiving services from agencies in CMHI systems of care with a similar group of children and families receiving services from agencies outside of CMHI systems of care.

- **U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Activities to Assess the Feasibility of Creating and Maintaining a National Child Abuse Registry :** This project examines the feasibility of developing and maintaining a national registry of child maltreatment perpetrators. WRMA is conducting two main studies: a Prevalence Study and a Key Informants Survey. The Prevalence Study examines the prevalence of interstate child maltreatment perpetrators. The Key Informants Survey addresses the structures and data standards of existing state registries, due process and other legal issues related to the development and use of such registries, current practices for sharing information, and the level of state interest in participating in a national registry. Patrick is responsible for database management, data analysis, and dissemination of findings.

- **U.S. Department of Health and Human Services, Administration on Children and Families:** Patrick serves as Project Director for the ACF ID/IQ contract and is responsible for the overall administration and management of the contract including planning, scheduling, fiscal control, liaison with the PSC Contract Manager and the federal Task Order Officers, and preparation of deliverables for all successful task orders. He coordinates the initial meetings pertaining to a decision to bid on an individual task order, to assess the available company and staff resources, and to identify qualified task leaders. Working with the

WRMA Chief Financial Officer, he is also responsible for the monitoring of all project spending and labor allocations.

- **City of Philadelphia, Department of Human Services (DHS), Community Oversight Board (COB) :** Patrick was Project Director in 2008 and 2009 for a team of WRMA Specialists in child welfare who support the COB in assessing DHS progress in the implementation of reform efforts overseen by the COB. The COB was an outgrowth of the Child Welfare Review Panel that issued the original set of recommendations in May 2007. The Mayor of Philadelphia appointed the panel following a highly publicized child death of a young girl under the care of DHS. Patrick directed the ongoing support of the COB through document review, interviews, focus groups, and quantitative and qualitative data analysis. He was responsible for fiscal management and all deliverables. Patrick also assisted the Panel in their review and analysis of child fatality cases, which contributed to the final report.

- **U.S. Department of Health and Human Services (DHHS), Administration for Children and Families (ACF), Office of Community Services (OCS), and the Department of Housing and Urban Development (HUD), Support for Results Oriented Management and Accountability (ROMA), Logic Model: Training, Technical Assistance, Data Collection, and Evaluation -** In accordance with the Government Performance and Results Act and the President's Management Agenda, OCS and HUD instituted the use of a ROMA Logic Model for submission of grant applications for various programs in their respective agencies. WRMA and its subcontractor, the Center for Applied Management Practices (CAMP), reviewed the submitted logic models and conducted analyses with respect to activities, outputs, and outcomes. They conducted on-site and satellite ROMA trainings to potential grantees and Federal managers and provided technical assistance to OCS and HUD grantees. Patrick was Project Director and was responsible for administrative oversight including tasking, fiscal control, liaison with the ACF Contract Manager, and submission of all project deliverables.

- **U.S. Department of Health and Human Services, Administration for Children Youth and Families, Children's Bureau, Technical Assistance for the National Child Abuse and Neglect Data System (NCANDS) -** Since 1988, WRMA has been responsible for collecting and analyzing the most important national statistics on child abuse and neglect in the United States. Data are collected on: children reported as victims of maltreatment; allegations of maltreatment and their disposition; perpetrators of maltreatment; and services received by children and families. An annual report, Child Maltreatment, is

produced and placed on the Internet by ACF and distributed to more than 10,000 institutions and individuals. The report has grown from a slim compendium of aggregate statistics to a sophisticated analytical depiction of the status of child maltreatment in the United States. New data collection activities mandated by Congress have increased its importance and influence in the field of child welfare. For two years in 2003 and 2004 Patrick was part of the NCANDS team and was responsible for documentation review and other aspects of quality assurance related to the integrity of data and validity of the analyses.

- **U.S. Department of Health and Human Services, Administration on Children and Families, Office of Community Services, Social Services Block Grant Data Analysis Project -** Since 1998, WRMA has provided technical support to the Office of Community Services (OCS) to establish the impact of Social Services Block Grant (SSBG) funding. The project has built an effective SSBG database that can be used for regular, continuing analyses of SSBG service and expenditure data. The initial stages of this project included validation of the electronic database developed by the Congressional Research Service using State post expenditure reports. Since then, WRMA has developed a new multiyear database in which all state post expenditure data are entered and validated. Patrick worked closely with the project manager, as well as with OCS personnel, in data collection, analysis, and report writing.

Appendix B – Sample Tools/ Model Overview

Sample Tools/Model Overview

Foster Care Predictive Model

Objectives: Administration for Children's Services (ACS) is responsible for the administration of the Child Welfare program within New York City. ACS did not have a method for forecasting the mix of the future foster care population and what facilities/resources would be required for this future population. KPMG used its analytic methods, templates, and techniques to tailor a predictive model that could assist ACS in forecasting, planning, and budgeting and for contract negotiations with vendor suppliers of child welfare resources.

Approach:

KPMG worked with ACS to understand the specifics of the Foster Care program, the entire process leading to Foster Care placement (from allegation to investigation, provision of family services, provision of preventive service, etc.), as well as, the available data attributes and program history available for modeling and changes in the program. KPGM then conceptualized the overall modeled population into two separate cohorts, each of which has its own nuances and is modeled separately: the in-care population (those are children currently in Foster Care as of the forecast data) and the in-coming population (those are children that are expected to enter the program throughout the forecast period). KPMG developed a self-updating model that ACS can use going forward to forecast (as of a given date) the number and types of service slots needed over the next six months, 12 months, or other judiciously chosen forecast period. The model was implemented in SAS, and allows ACS to easily re-run the model with updated data to develop updated forecasts. The modeling approach involved incorporating our understanding of the program into the model, specifically by modeling the various events that can occur while in the program as well as demographic characteristics, and evaluating the extent to which those are predictive of differences on the probability of stay/or exit from the program. Starting with a large number of possible attributes, KPMG used various statistical techniques to narrow down the potential attributes to the list used in the final model. The model itself is a discrete-time survival model, which predicts the probability of exit from the program based on the individual child demographics and program history, and is then used to forecast the probability that each child (from either the in-care or in-coming) population would exit the program during the forecast period.

The model also incorporated some flexibility to allow scenarios analysis (i.e., evaluating the impact of adjusting the age-out threshold, as well as the length of the forecast horizon).

The results are presented by child segments and by required resource segments.

Project Benefits:
Using this predictive model, ACS is now able to perform the following:
- Forecast the number and characteristics of children in foster care and the number of slots needed for different facility types in a given time horizon
- Output confidence intervals of the estimated numbers of slots
- Better plan and budget for this forecast
- Better negotiate with vendors/facilities based on the forecast

Appendix C – Required Forms

Required Forms

APPENDIX A
PROPOSAL AUTHENTIFICATION FORM

TITLE: Decision Support Tools and Predictive Analytics in Human Services

DUE DATE: APRIL 18, 2014

> The undersigned hereby offers to furnish and deliver the services as specified in strict accordance with the RFP and scope of proposal, all of which are made a part of this request. This offer is not subject to withdrawal without permission of the County of Allegheny Department of Human Services Director.

FULL LEGAL COMPANY NAME: KPMG LLP

DOING BUSINESS AS: KPMG LLP

STREET ADDRESS: 1601 Market Street, Philadelphia, PA 19103

AUTHORIZED SIGNATURE:

PRINT NAME: Robert Wentz

TITLE OF AUTHORIZED SIGNER: Lead Engagement Managing Director

TELEPHONE #: 267-256-2600   **FAX #: 267-480-3022**

WEBSITE URL: www.us.kpmg.com

E-MAIL ADDRESS: rwentz@kpmg.com

Chapter 2
COMPANY INFORMATION

(This information is for tracking purposes only and has no role in the determination of the responsible proposer.)

☐ Check here if your firm is registered with the Allegheny County Department of Minority, Women and Disadvantaged Business Enterprises

☐ Check here if your firm is a "Minority Business Enterprise" or "MBE" as defined in the Small Business Act, 15 USC

☐ Check here if your firm is a "Women Business Enterprise" or "WBE" as defined in the Small Business Act, 15 USC

☐ Check here if your firm is a "Small Business" as defined by the Small Business Administration (13 C.F.R. 121.201, in most cases, this means a business with 500 or fewer employees)

NOTE: THIS PAGE MUST BE SUBMITTED WITH YOUR PROPOSAL. ALL PAGES REQUIRES A LIVE SIGNATURE SIGNED IN BLUE INK.

APPENDIX B
ABBREVIATED APPLICATION

1. Primary Contacts

	Chief Executive	Chief Information Officer	Chief Financial Officer	Contract Processing Contact
Name	John Veihmeyer	Harold Moseley	David HW Turner	Robert Wentz
Email	jbveihmeyer@kpmg.com	hmoseley@kpmg.com	dhwturner@kpmg.com	rwentz@kpmg.com
Phone	212-909-5040	201-571-3036	201-307-8484	267-256-2600
Note: If you are an individual applying, you may identify yourself for all of the above roles.				

2. I/we certify that this I/we/this organization is not currently under suspension or debarment by the Commonwealth of Pennsylvania, any other state, county or the federal government.

    ☒ So certified

3. Have you ever obtained or been denied a performance or fidelity bond, or has your bond ever been revoked?

    ☒ Yes ☐ No

    If yes, explain:

    KPMG has obtained such bonds however we have never had one denied or revoked.

4. Has an application to be an Allegheny County provider/vendor been denied in the past?

    ☐ Yes ☒ No

    If yes, explain:

5. Have you ever filed for bankruptcy?

    ☐ Yes ☒ No

    If yes, explain:

6. Have your paid all taxes for the past years, including but not limited to real estate tax, employer taxes, employee withheld taxes, personal income tax (if individual)?

☒ Yes ☐ No

If yes, explain: KPMG has successfully paid all taxes for the past several years. Additional information can be provided upon request.

7. Do you have the capability to do electronic billing if required?

☐ Yes ☒ No

If yes, explain:

8. Do you currently carry the insurance (see contract on DHS website) required to enter into a contract with DHS?

☒ Yes ☐ No

If yes, explain: KPMG LLP maintains in full force and effect a comprehensive property/casualty insurance program that includes such coverage as employer's liability, workers' compensation, general and auto liability, fidelity and crime, and miscellaneous other property and liability coverage. The policies provide coverage that is underwritten with various insurers. The coverage limits provided under these policies are equal to or exceed those of other major accounting firms.

9. Do you/your staff have valid Pennsylvania driver licenses?

☒ Yes ☐ No

If yes, explain:

Robert Wentz, your proposed Engagement Managing Director is a resident of the state of Pennsylvania and holds a valid driver's license for the state. Other members of the engagement teams are residents of different states and hold appropriate driver's licenses for each state.

Signature: _____ Date: <u>April 18, 2014</u>

Print/Type Name: <u>Robert Wentz</u> Title: <u>Lead Engagement Managing Director</u>

Form **W-9**
(Rev. August 2013)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer
Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Name (as shown on your income tax return)

KPMG LLP

Business name/disregarded entity name, if different from above

Check appropriate box for federal tax classification:

☐ Individual/sole proprietor ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☑ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ **P**

☐ Other (see instructions) ▶

Exemptions (see instructions):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

Address (number, street, and apt. or suite no.)

345 Park Avenue

Requester's name and address (optional)

City, state, and ZIP code

New York, NY 10154-0102

List account number(s) here (optional)

Print or type
See Specific Instructions on page 2.

Part I   Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number
__ __ __ – __ __ – __ __ __ __

Employer identification number
██████████████

Part II   Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and

2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and

3. I am a U.S. citizen or other U.S. person (defined below), and

4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here Signature of U.S. person ▶   Date ▶ April 18, 2014

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. The IRS has created a page on IRS.gov for information about Form W-9, at *www.irs.gov/w9*. Information about any future developments affecting Form W-9 (such as legislation enacted after we release it) will be posted on that page.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, payments made to you in settlement of payment card and third party network transactions, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the

withholding tax on foreign partners' share of effectively connected income, and

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct.

Note. If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

• An individual who is a U.S. citizen or U.S. resident alien,

• A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,

• An estate (other than a foreign estate), or

• A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

Cat. No. 10231X

Form **W-9** (Rev. 8-2013)

Proposal to serve Allegheny County

APPENDIX D

Allegheny County **Vendor Creation Form**	Controller's use only: Supplier No. _____ 1099 Eligibility: ☐ Yes ☐ No

☐ Add   ☐ Change   Supplier No. _____

Company Information:

KPMG LLP
_____

Company Name (Please type or print)

Federal Tax ID (TIN)

███████████

Original W-9 must be attached

Required information
Type of Service Provided

	Type of Commodity Provided (please describe below)
☒ Independent Contractor ☐ Rent	
☐ Maintenance/Service Agreement ☐ Care Giver	
☐ Insurance ☐ Legal	
☐ Personal Reimbursement ☐ Medical	
☐ Other (please list)	

Required Information

Minority Or Women Owned   ☐ Yes ☒ No

If yes select ethnicity and gender of the vendor below:

☐   Asian Pacific American
☐   Black American
☐   Hispanic American
☐   Native American
☐   Subcontinent Asian American
☐   Non-Minority Woman
☐   Other

If Yes   ☐ Male ☐ Female

Certified By: ☐ PAUCP   ☐ PADGS   ☐ Non PA Certification

(attach copy of certification)

Non-Profits including Faith Based Organizations

☐ Faith Based Non-Minority
☐ Faith Based Minority
☐ African American Non-Profit
☐ Other Non-Profit

Outreach Manager Interface   ☐ Yes ☒ No

APPENDIX D

Industry Classification by NAICS Code

Primary Industry   <u>541211</u>

Secondary Industry (if applicable)   _____

*If code is not known go to http://www.census.gov/epcd/naics02/naicod02.htm and select the correct code.

Supplier/Remit To Information (Search Type "P") – (Where PO should be sent to place order)

Please print or type

Supplier/Payee Name

Address Line 1

Address Line 2

Address Line 3

City   State

ZIP Code

Telephone Number

Fax Number

Required Information

Supplier/Remit To Information (Search Type "V") – (Where check will be mailed for payment. Check must be made payable to exact name listed under TIN provided or check cannot be processed.)

Please print or type

Supplier/Payee Name   <u>KPMG LLP</u>

Address Line 1   <u>1601 Market Street</u>

Address Line 2

Address Line 3

City   <u>Philadelphia</u>   State <u>PA</u>

ZIP Code   <u>19103</u>

Telephone Number   <u>267-256-7000</u>

Fax Number   <u>267-256-7200</u>

*If the "remit to" information provided on form does not match invoices submitted for payment, the Controller's Office MUST contact supplier to verify address information before payments are processed. Thank you for your cooperation.

APPENDIX D

If the Allegheny County Department with which you do business is known, providing the information below will help in the processing of your payments. Failure to include the information may result in processing delays.

Allegheny County
Departmental Contact

Name	Leslie Lewis-Pollard	
Telephone No.	412-350-5663	
Fax No.	412-350-3414	
Email Address:	Llewis-pollard@alleghenycounty.us	

Supplier/Payee Contact Name

Name	Robert A. Wentz
Telephone No.	267-256-2600
Fax No.	267-480-3022
Email Address:	rwentz@kpmg.com

COUNTY OF ALLEGHENY

M/W/DBE PARTICIPATION WAIVER REQUEST

PROVIDER	KPMG LLP
ADDRESS	1601 Market Street, Philadelphia, PA 19103
CONTACT PERSON	Robert A. Wentz
TELEPHONE NUMBER	267-256-2600
EMAIL ADDRESS	rwentz@kpmg.com
FISCAL YEAR/PERIOD	

In all instances a good faith effort must be made to meet the M/W/DBE contract goals as outlined in Section 3.10.8.8 of the "Minority and Women Business Enterprise Utilization Affirmative Action Requirements" document.

If you plan to perform the entire contract without using M/W/DBE subcontractors and/or suppliers or have not completely met the M/W/DBE goal of 13% MBE 2% WBE, the following must be attached and submitted with this form:

* A detailed explanation of your normal business practice
* Operation and/or Inventory Profile
* An active company supplier/subcontractor diversity policy
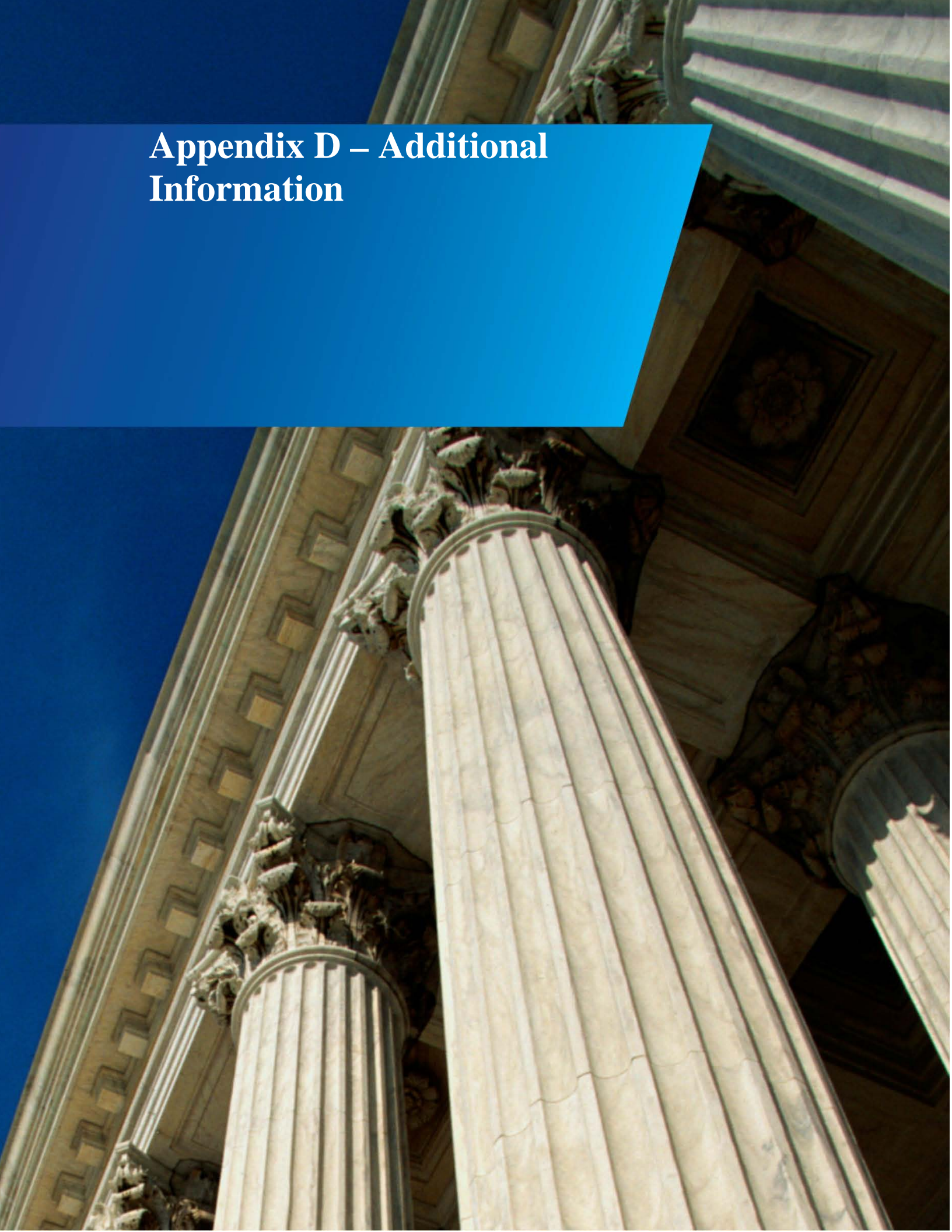* Explanation as to why M/W/DBE participation waiver is being requested

Please see **Appendix D** for requested information.

Note: The fully completed M/W/DBE Participation Statement must accompany this waiver request, that shows your "Good Faith Effort"

Prepared By: Robert A. Wentz   Title: Lead Engagement   Date: 4/18/14   Signature:
Managing Director

Appendix D – Additional Information

Corporate Responsibility

KPMG aspires to be recognized as a leader in Corporate Responsibility through the integrity of our individual and collective actions, and the impact we have on our communities, the environment, and the capital markets we serve. There are four pillars to our corporate responsibility platform: Integrity, Corporate Citizenship, Diversity and Inclusion, and the Environment.

Integrity

Acting with integrity is a core value at KPMG and we've worked hard to create an ethical culture—one in which everyone feels a sense of personal responsibility for doing the right thing, in the right way. This ethical culture informs our business conduct, drives our strategic priorities, and underpins our corporate responsibility platform.

Our Ethics and Compliance program focuses on preventing and detecting violations of law, regulatory requirements, and policy; and promotes our ethical culture. It includes our Code of Conduct and our core values, which together define the nature of our firm, what we expect of our people, and what the market and communities can expect of us.

We also develop our people so that they lead by example, whether they spend their entire career at KPMG, or join the ranks of our alumni worldwide. Within our firm, we empower them to manage and mentor others, and advance diverse, high-performing teams. But we also strive to inspire them. We want them to be responsible corporate citizens who make ethical decisions in business and in life, understand their role in caring for our communities, and have an acute sensitivity about how business decisions impact the environment.

Citizenship

Businesses must move beyond good governance, compliance, and ethical behavior, and be committed allies of other groups in society to address social and environmental issues. KPMG's approach to corporate citizenship is founded on the belief that business has a moral responsibility and critical role to play in helping to resolve societal issues.

With an overall focus on and investment in education, talent sustainability, and workforce readiness, our corporate citizenship framework comprises community involvement, philanthropy, corporate giving through the KPMG Foundation and in our local marketplace, nonprofit strategic alliances, employee and skills-based volunteerism and pro bono services, and commitment to the environment.

Diversity and Inclusion

From a business perspective, attracting and retaining a diverse workforce is a strategic imperative for KPMG. Our intellectual capital must be as diverse as the clients we serve and the communities in which we conduct business, and our ability to leverage the diverse experiences, talents, ideas, and perspectives of our professionals is a key contributor to our success. Diversity and inclusion play a critical role in our ability to sustain both a high-performance culture and maintain a competitive advantage in the global marketplace.

We actively seek out strategic alliances that enable us to further enhance the value proposition for current and prospective employees, and prepare future talent to replace the current workforce. These alliances include our relationships with organizations like Ascend, the Association of Latino Professionals in Finance and Accounting (ALPFA), First Book, Junior Achievement, the National Academies Foundation, and the National Association of Black Accountants (NABA).

KPMG also recognizes the value and benefits diverse businesses can bring as suppliers and subcontractors to the firm, our clients, and our communities. Our Supplier Diversity program is supported by leadership and underscored by a broad supplier diversity policy to actively seek and encourage qualified diverse vendors to compete for the firm's business.

KPMG is proud of the progress we've made toward fostering a diverse and inclusive work environment, and of the fact that our efforts continue to be recognized in the marketplace. This is evidenced by our consistent placement on several prestigious lists, including DiversityInc's Top 50 Companies for Diversity, Working Mother's Best Companies for Multicultural Women, and the Human Rights Campaign's Corporate Equality Index, among many others.

Environmental Sustainability

KPMG's commitment to environmental sustainability is a key element of our corporate responsibility strategy and driven through our Living Green program. Grounded in responsible business practices and focused on the impact our business has on our local communities, Living Green exemplifies high performance and environmental stewardship. This initiative has increased awareness of the firm's energy and carbon consumption and waste management efforts; helped us better understand the impact of our environmental practices; and enabled us to evolve our goals, processes, and measurements to successfully reduce and manage our carbon footprint.

Our focus on environmental sustainability also extends to our clients: KPMG's Climate Change and Sustainability Services professionals enable us to help businesses around the world better understand the complex evolving business and regulatory risks related to climate change and sustainability.

Supplier Diversity

KPMG evaluates potential subcontractors using a variety of measures, including specific client requirements for subcontracting, the potential subcontractor's qualifications in the relevant subject area, and independence considerations (given KPMG's significant independent audit practice). Background checks are conducted and information is shared with our risk management function for approval. Depending upon the nature of the subcontracting arrangement as well as any existing relationships with the subcontractor, additional approvals by KPMG leadership may be required.

Although we do not have specific goals in place for small business subcontracting, we can support the specific subcontracting requirements clients on a case-by-case basis. If the County has target goals for small business subcontracting, we will gladly discuss these with you and work to onboard the best contractor that meets our mutual requirements.

In fiscal year 2012, 17.4 percent ($140 million) of KPMG's overall procurement spend was with small and diversity-owned businesses. Progress since our program formally launched in 2008 has been significant. KPMG's 2015 goals include increasing the representation of small and diversity-owned businesses to 20 percent of our total procurement spend, including goals for 7.5 percent MBE and 5 percent WBE spend.

KPMG's Supplier Diversity Spending					
	FY2008	FY2009	FY2010	FY2011	FY2012
Total spend with small and diverse businesses	7.5%	9.90%	17.27%	17.22%	17.36%
Minority-owned Business Enterprises (MBEs)	2.2%	3.25%	5.81%	6.43%	6.20%
Women-owned Business Enterprises (WBEs)	2.1%	3.12%	4.92%	4.41%	5.09%
Veteran-owned Business Enterprises (VBEs)	0.4%	0.50%	0.52%	0.62%	0.84%
Disabled Veteran-owned Business Enterprises (DVBEs)	0.2%	0.21%	0.35%	0.27%	0.40%
Lesbian-, Gay-, Bisexual- and/or Transgender-owned Business Enterprises (LGBTBEs)	0.0%	0.01%	0.13%	0.18%	0.65%

In addition to our subcontracting efforts, KPMG's Supplier Diversity program seeks to engage qualified small and diversity-owned businesses as suppliers of indirect goods and services to the firm. Equal opportunity is given to minority-owned; women-owned; veteran-owned; disabled veteran-owned; disabled-owned; and gay-, lesbian- bisexual- and/or transgender-owned businesses to joining our supplier base by completing and participating in the purchasing process, subject to established policies and procedures.

KPMG is an active member of the following organizations:

■ The Women Business Enterprise National Council (WBENC)
■ The National Minority Supplier Development Council (NMSDC)
■ The National Gay & Lesbian Chamber of Commerce (NGLCC)
■ The U.S. Hispanic Chamber of Commerce

KPMG uses many sources to locate diverse suppliers, including the NMSDC, WBENC, NGLCC, and SBA, along with over 300 local and regional certification bodies. We encourage eligible suppliers to register with one or more of these organizations rather than to make contact with us speculatively.

Explanation as to why M/W/DBE participation waiver is being requested

For this engagement, KPMG has proprietary techniques, methods, and models and experienced internal resources required to plan, execute, and complete this engagement. We will be subcontracting with WRMA to supply the team with additional human services domain experience. Though our assigned subcontractor, WRMA is not an M/W/DBE firm, they are a certified veteran-owned small business.

Attachment A

Model License Agreement

All right, title and interest in and to the Licensed Materials as described in the engagement letter , including but not limited to any copyrights and trade secrets thereto (Licensed Materials), shall be owned exclusively by KPMG. KPMG hereby grants to the County a limited, nonexclusive, nontransferable license to use the Model, on a royalty-free basis solely for internal business purposes of the County.

The County may not commercially exploit the Licensed Materials or make them available to anyone outside the County, in any form without KPMG's prior written consent. If the County sells or otherwise disposes of a computer on which the Licensed Materials have been installed, the County must first erase the Licensed Materials from its hard drive or other storage device.

The Licensed Materials are being provided "as is" without warranties of any kind; any and all implied warranties of merchantability or fitness for a particular purpose are expressly excluded. The County is solely responsible for the completeness and accuracy of input and calculations and for the use of calculated results in any form or format and any judgments and business decisions based on its use of the Licensed Materials. KPMG has no obligation to update the Licensed Materials, regardless of any changes to relevant facts or tax or accounting laws, rules or regulations in the future.

This license to use the Licensed Materials does not include any license of the right to use any third party software included as part of or otherwise necessary to use the Model (e.g., Microsoft Excel) and the County is solely responsible for obtaining the right to use such third party software. KPMG makes no warranties or representation hereunder, expressed or implied, as to the quality, capabilities, operations, performance or suitability of any third-party hardware or software including the ability to integrate with any software developed for the County, and the quality, capabilities, operations, performance and suitability of such third-party hardware or software lies solely with the County and the vendor or supplier of that hardware or software.

In no event shall KPMG, its partners, managing directors, principals, agents or employees (the "KPMG Parties) be liable for any costs, damages or expenses to the County or others relating to the County's use of the Licensed Materials after acceptance by the County under any circumstances, including any direct, indirect, incidental, special, exemplary, punitive, consequential or other damages whatsoever, even if the KPMG Parties have been advised of the possibility of such damages (including, but not limited to, liability for work stoppage, computer malfunction, loss of use, goodwill , data or profits), without regard to the form of any action, including but not limited to contract, negligence or other tortious actions, arising out of or in connection with the Licensed Materials, any content on or accessed by use of the Licensed Materials, or any copying, display or other use thereof and the County hereby releases the KPMG Parties from any such liability. Further, the County hereby agrees to indemnify, hold harmless, and defend the KPMG Parties from and against any and all third party claims, costs, damages and expenses (including reasonable attorneys' fees) asserted against any of the KPMG Parties, resulting from the County's use of the Licensed Materials or its breach of any agreement or obligation hereunder, including, without limitation, the disclosure of the Licensed Materials to any third party, or any unauthorized use of the Licensed Materials, and decisions and calculations made using the Licensed Materials, except claims that the Licensed Materials infringe the copyright or other proprietary rights of a third party. KPMG hereby agrees to indemnify the County with respect to claims that the Licensed Materials (but excluding any third party software included as part of or otherwise necessary to use the Licensed Materials (e.g., Microsoft Excel)) infringe the copyright or other

proprietary rights of a third party in accordance with the terms of KPMG's engagement contract with the Client regarding infringement.

The duty of nondisclosure described herein shall not include any information with respect to the structuring, implementation, or tax consequences of any transaction under the laws of the United States or any State.

This License may be terminated by KPMG upon written notice to the County, in the event that the County breaches any terms of this agreement or if required by any professional or regulatory body. If the License is terminated, the County agrees to promptly remove all copies of the Licensed Materials and certify to KPMG in writing that it is no longer using the Licensed Materials.

This license supersedes all prior oral or written proposals, agreements or representations on the same subject matter and may not be modified except in writing signed by the County and KPMG. If any provision of this license is held unlawful or otherwise unenforceable as written, the provision shall be modified so as to most closely carry out the expressed intent.

Contact Us

Robert A. Wentz
Lead Engagement Managing Director
267-256-2600
rwentz@kpmg.com

www.kpmg.com